

Strategy for Designing English Language Resource-Based Learning Materials in the Moodle LMS

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Abstract. This research examines resource-based learning (RBL) strategy in teaching and learning English as a foreign language in Moodle LMS contexts. This research is exploratory case studies approach in qualitative research design—the sample of this research is 36 English lecturers from five south Jakarta higher education institutions. The data were gathered using online interviews and focus group discussions and analyzed by thematic analysis. The findings show that accommodated strategy uses Resource-Based Learning involved learning objectives; structure, organization, and instructional design; by doing - through repetition, practice, try, and mistake; structured feedback is built-in for English language learners; and introductions, overviews, and evaluations. English lecturers and instructors must lead and promote learning via proper RBL strategies. Given the increased availability of resources and their flexibility in handling and use, it appears appropriate to transition toward a resource-based approach. Online exploration of Moodle features, RBLE preparatory components, and English language teaching possibilities. Moreover, the preparation components for designing RBL Instructions are contexts, instruments, and scaffolds. In conclusion, English lecturers and instructors must lead and promote learning via proper RBL strategies. Given the increased availability of resources and their flexibility in handling and use, it appears appropriate to transition toward a resource-based approach. Online exploration of Moodle features, RBL preparatory components, and English language teaching possibilities. For this group of educators, more research may reveal what form of online media infrastructure they need, both individually and as a group, to support the knowledgeability of the RBL model's efficacy.

Keywords: designing strategy; English language; English language teaching; resource-based learning; Moodle LMS.

Abstrak. Penelitian ini bertujuan untuk mengkaji penerapan pembelajaran berbasis sumber (Resource Based Learning-RBL) dalam konteks belajar mengajar bahasa Inggris sebagai bahasa asing dalam konteks Moodle LMS. Penelitian ini menggunakan pendekatan studi kasus eksploratif dengan desain penelitian kualitatif—sampel penelitian ini adalah 36 dosen bahasa Inggris dari lima perguruan tinggi di Jakarta Selatan. Data dikumpulkan dengan menggunakan wawancara daring dan diskusi kelompok terfokus dan dianalisis dengan analisis tematik. Temuan menunjukkan bahwa strategi yang diakomodasi menggunakan Pembelajaran Berbasis Sumber Daya melibatkan tujuan pembelajaran; struktur, organisasi, dan desain instruksional; dengan melakukan - melalui pengulangan, latihan, percobaan, dan kesalahan; umpan balik terstruktur adalah bawaan untuk pelajar bahasa Inggris; dan pendahuluan, ikhtisar, dan evaluasi. Dosen dan instruktur bahasa Inggris harus memimpin dan mempromosikan pembelajaran melalui strategi RBL yang tepat. Mengingat ketersediaan sumber daya yang meningkat dan keluwesannya dalam penanganan dan penggunaan, tepat untuk beralih ke pendekatan berbasis sumber daya. Eksplorasi daring fitur Moodle, komponen persiapan RBL, dan kemungkinan pengajaran bahasa Inggris. Selain itu, komponen persiapan untuk merancang instruksi RBL adalah konteks, instrumen, dan perancah. Kesimpulannya, dosen dan instruktur bahasa Inggris harus mengedepankan dan meningkatkan pembelajaran melalui strategi RBL yang tepat

Kata kunci: strategi desain; bahasa Inggris; pengajaran bahasa Inggris; pembelajaran berbasis sumber daya; LMS Moodle

INTRODUCTION

Opening Higher Education under the new standard policy during the pandemic is regarded as an alternate method of fulfilling university students' educational demands from remote education through an online procedure in Indonesia. Conventional (face-to-face) learning was necessary to increase education quality, given English language learners' lack of understanding of the need to study independently at home and their insufficient literacy cognition regarding reading capability and providing references. This condition is consistent with a remark made by ((Robinson et al., 2020), who indicated that if students participate in an online course in a minimum manner, the course would be considered inadequate. The COVID-19 epidemic that has swept the globe, most notably in Indonesia, has affected pedagogy. These circumstances, directly and indirectly, affect academics at formal Higher Education institutions (Murad et al., 2020). This assertion is borne up by statistics on the number of students and learners affected by the COVID-19 epidemic, which was determined based on the closure of formal education systems. Academics saw a favorable influence in designing and innovating in learning, enhancing Learning Management System based learning, anticipating learning when hurdles arose throughout the learning process, and optimizing media in learning.

Throughout the years, many Indonesia Higher Education and Universities have transitioned and transformed their educational English language practices from supplementing face-to-face instruction with online components (blended or flipped learning) to completely integrating online courses using asynchronous and synchronous communication methods. With an increased interest in constant learning, economic responsibility, and creative teaching, Firmansyah et al. (2020) explained that higher education institutions are greatly encouraged to create online learning to fulfill the rising demand for higher education and remain competitive in the face of globalization and technological development. Unprepared English lecturers, instructors, and learners are a prominent issue in online learning (Rosytawati, 2018). English lecturers must quickly convert face-to-face materials to online arrangements while learners encounter the additional challenge of studying under their time constraints (Hidayati and Husna, 2020). English lecturers' incapability to integrate technology into their online instruction was the primary source of confusedness. Even when online instruction was possible, Pevneva and Edmunds (2020)) found that English lecturers and learners both felt a separation consistency since they could not see one another and could only communicate through text messages sent via email or online chats. As a result, the most critical issues for making the adaptations were maintaining communication and avoiding solitariness. Indonesian Universities and higher education have been given a clearer picture of responding to such emergencies and how to employ communication technology in the classroom. On the other hand, these findings on cataclysms in higher education mostly focused on autonomy-based learning implemented and accommodated to online learning to continue English language education delivery (Efriana, 2021).

English lecturers may now utilize a wide range of innovative instruments to enhance the quality of the teaching-learning process thanks to modern technology, notably the internet. Wong (2020) clarified that educators' training on technology integration is becoming more crucial as these technologies become more widely used by students and educators alike. There are several learning management systems (LMS) in the market, and one of them is Moodle, a free and open-source e-learning platform. Roliak (2021)) established that the term "Courses management system (CMS)" or even "virtual learning" had been used in the relevant literature to describe this system. In Wu et al. (2017)) research, Moodle will be referred to as LMS. These online learning technologies enable English language learners to continue their education outside the classroom. Blending conventional classroom pedagogies with different web-based technologies is made more accessible by Moodle. A self-directed, outside-of-the-classroom exercise that develops learner autonomy is recognized as

Moodle. According to Gamage et al. (2022), learners esteem online applications since they can study quickly. As a result, the Moodle environment is developed with a constructivist educational framework in mind and attempts to improve student's learning experiences. One of the essential advantages of using Moodle as a teaching tool is that English lecturers or instructors may quickly visit the program's website and create a page specifically for their online classes

Constructivism and social constructionism are a part of Moodle's declared philosophy, which emphasizes that learners and instructors have a role in the educational process. Sinnott and Xia (2020) described that those students might comment on database items (or even add their entries) or collaborate in a Wiki using Moodle's social constructionist design elements, such as the ability for English language learners to work together on a project. Using Moodle to support the social constructionist argument is a brilliant idea. Kozlova and Trysak (2021) enhanced that Moodle is a great teaching supplement to traditional classroom education and a supportive companion for blended (or hybrid) course forms, but it cannot replace the brick-and-mortar classroom. English lecturers may utilize a variety of social interaction and collaboration tools in Moodle, which was built with social constructivism in mind. These tools include Wikis, forums, chats, blogs, and workshops. Subgroups (visible or hidden) may be formed, and learners can engage in synchronous chat activities with each other. Ruiz-Molina et al. (2018) defined independent learners as individuals who take ownership of their education. Autonomous learners take the initiative and monitor and assess their progress. Thus, increasing learner autonomy in formal educational situations creates superior learning in an online classroom regarding reflection and self-awareness.

Moodle is a software tool capable of converting instructional materials into web-based forms. When it comes to the demands of today's millennial generation of English language learners, Natalia and Julia (2018) exposed that employing a learning management system (LMS) Moodle online has become critical. As a result of Moodle's excellent base features, Acar and Kayaoglu (2020) found that enormous extensibility and even some possibly adaptable features, our institution has adopted this LMS as its official LMS to facilitate the reuse of instructional materials across local faculties and the choice of a centralized system. If it has been around, students and faculty have found it effective and easy to use. Sinnott and Xia (2020) expressed that Moodle is an open-source platform that can be customized to meet the needs of any educational institution. However, several flaws have been discovered via its use, such as the use and usefulness of communication capabilities.

The characteristic of autonomous learners is their active and independent interaction with the target language, one of the primary components of teaching and learning. (Phi, 2019) stated that English language lecturers may assist students in establishing their learning techniques and taking control of their education. Cognitive and metacognitive learning practices are used to empower learners. Learning tools come in many categories. Tinsley and Dolezal (2019) specified that textbooks, journals, reports, publications, and documents are considered regular and reputable resources. Resource-based learning (RBL) develops as a reaction to determining learners' access to information before the advent of digital technology. Predigital materials were passive, provided by specified people, and utilized to achieve specific educational purposes. Conversely, today's digital surroundings have improved our society's access to resources and knowledge ((Hidayati & Husna, 2020)). The difficulty is a factor in determining if an English learner is willing to learn. According to Wijaya (2019), RBL is a procedure for learners to learn willingly without instructor intervention.

Teaching and learning English as a foreign language in online or virtual contexts calls for investigating resource-based learning (RBL), which is the focus of this research. Several studies have concluded previous investigations. Instructors who understood information literacy were well-

prepared to teach resource-based tasks in the classroom. (Kuncoro & Junaedi, 2018) conducted another RBL case study in a science class. The research had science instructors create their classes using RBL components, including contexts, resources, tools, and scaffoldings. RBL considerably aided instructors in creating online learning environments. Kononets et al. (2020) described using RBL in a University context. For her learners' benefit, they conducted research. Her e-learning materials were publicly hosted. Thus, RBL helped her combine classic and modern resources. Though ideally expected to be a practical research-based learning strategy, have implemented and adapted for all levels of educational purposes. However, the practical application of this RBL model is limited because of the online mechanism's integrated-challenging necessity. This paper aims to qualify the English lecturers' strategy and explore the preparedness RBL model implemented in the Moodle LMS. Teaching and learning English as a foreign language online may benefit from resource-based learning (RBL), which is the focus of this research. The research question involved 1) what are English lecturers' strategies for designing English language resource-based learning materials based on Moodle LMS?; 2) What component needs to be prepared for resource-based learning materials based on Moodle LMS?

METHOD

Research Design

The case study approach was utilized to gain in-depth knowledge of the instruments designing English language learning resources based-learning material in the Moodle LMS platform. Exploratory case studies investigate the data on both a consistent and a deep level to comprehend the data's phenomenon so that it encourages researchers to observe and gather data in realistic circumstances. It is possible to describe better the engagement of English language learners (ELs), which allowed the researcher to observe them multiple times within their online classroom context, engage with them through in-depth interviews and informal conversations, and collect English lecturers' objects that communicated to their strategies in resource-based learning materials.

Subject / Participants

This research included 36 English lecturers from five south Jakarta higher education institutions. They accommodated English language learning in an online situation utilizing Moodle LMS for two years since the pandemic. Despite this, they all received formal and informal online education platforms at their institution, where the English teaching concentration was specific for economics, science communication, information technology, and political science. Most participants have been English lecturers for over five years and have a functional academic position (*Jabatan Fungsional Akademik-JFA*) in their institution.

Instruments

Qualitative surveys employ open-ended questions to elicit lengthy written or typed responses. The questions will elicit responses that provide perspectives, narratives, or testimonies. The open-ended questionnaire was divided into four sections; English lecturers' demographic details, English lecturers' fulfillment level with the online learning environment, English lecturers' completion with the Research-based learning support, and English lecturers' experience integrating the RBL model to Moodle LM. Qualitative survey questions collect information involved as attitudes, experiences, and obstacles to enforcing the RBL model in Moodle LMS. The survey is typically employed to detect behavioral clues that might guide the questions. It is adapted from Pradipta et al. (2020) and is often

used with interviews or focus groups. These activities assist in identifying beginning themes or concerns to pursue further in the study's objectives. Surveys may be utilized iteratively, with questions being updated and adjusted during the study to elicit new data. The research elaborated on a semi-structured interview and an online focus group discussion about its formats. It has called categorical data in statistics because it can be arranged in groups based on the attributes and properties of RBL implementation in the online environment. The semi-structured interview is designed to elicit respondents' emotions and thoughts on designing English language resource-based learning materials in Moodle LMS. The semi-structured interviews are adapted and modified from the David-West et al. (2018) study. On the other side, randomly chosen individuals participated in a monitored and structured online discussion to examine the collaborative and interactive method used in the Moodle LMS as the online environment. Synchronous focus groups were conducted using Zoom conferences, video calls, text-based chat rooms, and instant messaging protocols (IM). There were three competent local and English foreign lecturers as instructors with an academic rank of associate professor or higher in education and at least three years of expertise in online teaching who reviewed the survey for its validity. When the survey's structure and content were altered to match their suggestions, the concept of content validity was used.

Procedures and Data Analysis

Data collection techniques include in-person interviews and online focus group talks. English lecturers were required to research instructional resources that might be utilized to teach English in both traditional and virtual classroom settings. Nineteen English instructors were asked six open-ended questions during semi-structured interviews to grasp the contrasts between interactive and collaborative teaching strategies in the Moodle environment. The 38 English instructors were asked to evaluate their colleagues' performance using pre-defined assessment criteria and, if desired, to contribute to the online forum conversation. The data were evaluated via the lens of content analysis. This method was broken down into many stages: To begin, the transcribed replies of the participants were rigorously examined to identify meaningful data units related to the study's objective. The portions were determined based on inferences from the literature or participant expressions. These categorizations assisted in finding the fundamental themes underpinning the participants' opinions, experiences, and attitudes. The findings were grouped and analyzed around these themes to reflect the viewpoints of English professors on adopting communicative and collaborative mechanisms in Moodle. The study has chosen to use the Thematic Analysis method. Thematic analysis is a qualitative data analysis that focuses on recognizing, organizing, and interpreting the themes that emerge from the study. Themes do not exist independently of the researchers doing the analysis. Accordingly, thematic analysis implies a qualitative data analysis technique for various data sets and theoretical perspectives.

RESULTS AND DISCUSSION

Finding

Data were gathered from April to June 2021 (8 weeks total) while English lecturers were still 'new' complete online teaching. During the epidemic, identifying and approaching individuals was strict. All participants were told of the study's specifics before clicking the box indicating that they understood and consented to participate. The study section did not keep any personal data from participants. Focus groups and one-on-one interviews were used to collect data, then organized thematically. A Nvivo-based analysis of the data obtained was used to do this. Interview transcripts

and reflection notes were analyzed to find common patterns within the participants' replies. These themes were then utilized to group the responses into several categories. During this approach, sub-themes were also discovered. To develop a final set of themes based on the content of interviews and reflective notes, researchers triangulated data until they reached an agreement.

Table 1 Demographic Participants

Items	Element	Total of Participants (N:36)	Total in Percentage (%)
Gender	Male	13	36 %
	Female	23	64 %
Moodle LMS experience	Poor	9	25 %
	Moderate	18	50 %
	High	9	25 %
Teaching Online Experience	Poor	8	22 %
	Moderate	15	42 %
	High	13	36 %
Education Background	Master	31	86 %
	Doctorate	5	14 %

The study has identified the credibility criteria by selecting knowledgeable and credible agents representing learning objectives; structure, layout, and instructional design; learning by experience (recurrence, preparation, attempt, and mistake); structured feedback is essential for English language learners. The themes and subthemes maintain their identity and supply obvious connections between participants. Before the final phase, many rounds of coding, categorizing codes into themes, and refining themes and subthemes were conducted. The representation extracted the most representative instances of these themes and subthemes and performed a final analysis of the study objectives.

What are English lecturers' strategies for designing English language resource-based learning materials based on Moodle LMS?

Table 2 English Lecturers Strategies for Completing Resource-Based Learning

Main Theme	Sub-Theme	Moodle Integration
Learning objectives	There is an unambiguous statement of any required knowledge or capabilities	Static Course Material (files, text page, web page, link, directory, label)
	The targeted learning outcomes are stated clearly.	
	The targeted objectives are communicated in a meaningful and approachable manner.	
	The planned learning objectives are relevant to the requirements of your students	
	The desired educational results Avoid using language students may not be familiar with before beginning the topic.	
Structure, organization, and instructional design	The information is adaptable to a variety of learning styles.	Lesson (Grade Options, Flow Control, Lesson Formatting, Access Control, Pop-Up to File or Web
	The many components contribute to creating a comprehensive and effective learning environment.	
	The information is aesthetically appealing, encouraging English language learners to engage with it.	

	<p>The materials developed to make learning more accessible to individuals with impairments</p> <p>There are appropriate paths through the content for students with varying abilities or motivations, enabling them to feel as if they are gaining something meaningful from it in the allotted time.</p> <p>There is a great deal of activity in online or computer-based resources.</p> <p>It is very simple for pupils to go backward and forward.</p> <p>Students may save items to their bookmarks and return them at their leisure.</p>	Page, and Other Lesson Settings)
By doing - through repetition, practice, try, and mistake	<p>The content promotes deep learning over superficial learning.</p> <p>Self-assessment opportunities are effectively used.</p> <p>The assignments are unambiguous and unequivocal.</p> <p>The questions and assignments are enticing.</p> <p>The responsibilities are sufficiently significant.</p> <p>The convenience of seclusion is well-used.</p> <p>English students will be compelled to use their fingers on the keyboard or the mouse to access on-screen materials</p> <p>The learning-by-doing assessment measures students' attainment of the desired goals. Cumulatively,</p> <p>Students are prepared for future evaluation via the use of learning by doing.</p>	Quizzes Settings, Display, Grades, Students May Review, Common Module Settings, Feedback,
Structured feedback is built-in for English language learners.	<p>instantaneous feedback</p> <p>Feedback is genuine in its response to what pupils have done.</p> <p>The criticism serves as a reminder to pupils of what they accomplished.</p> <p>The feedback comments satisfy each student's curiosity.</p> <p>Students get adequate appreciation without feeling patronized in response to feedback comments.</p> <p>Include anything in your feedback comments that will assist pupils who made errors in not feeling completely inept.</p> <p>Each section is presented in an engaging, entertaining manner.</p>	Editing a Quiz, Create and Edit Question Categories, Create and Manage Questions, Feedback for a Numeric Question, Assemble the Quiz, Preventing Glossary Auto-Linking in Quiz Questions, and Preventing an Open-Book Quiz.
Introductions, overviews, and evaluations	<p>Confidence is inspired through introductions.</p> <p>The introductions inform students about how the items are intended to function.</p> <p>Students can instantly immerse themselves in the learning process.</p> <p>There are concise and informative summaries or reviews.</p> <p>Summaries and reviews assist students in rapidly and efficiently revising the content.</p> <p>Summaries serve as a shortcut for frequent flyers.</p> <p>there is an unambiguous statement of any required knowledge or capabilities</p>	Reports and Logs, The Reports Page, Viewing Logs, Viewing Activity Reports

Learning objectives

Student involvement and community-building are the primary goals of these programs regarding learning results. The use of community, group, and collaboration suggests that the RBL regards student participation and community as significant reasons (even learning outcomes) for the

online/blended settings. Defining what engagement and community building entail in terms of learning outcomes is helpful when educating to promote active or engaged learning.

Although I have undoubtedly been skeptical about English language learning online classes at times, I believe my skepticism was primarily driven by fear and, let us face it, a lack of knowledge about the potential of online learning. I have read those online learning outcomes, especially writing and critical thinking, are generally more advanced. (Participant 02)

The administrator may add site-wide standard outcomes. Using the import outcomes feature, several expected outcomes may be imported. Make a list of desired objectives before you begin your class. Use the Outcome scales to grade each student in that activity. If your module does not have built-in grading, you may change the grades in the Grader report. (Participants 13)

To the greatest extent feasible, intended learning outcomes should be concise. When English lecturers draft the learning objectives, they go through congruent outcomes that may be merged without sacrificing their distinctiveness. Comprehending how lower-level cognitive abilities (such as knowing and understanding) serve as a basis for higher-level cognitive skills might help combine results in many ways (such as applying and evaluating). When an English language learning activity or course is over, students should describe what they accomplished and what they learned. In some way, each result is graded. Compatibilities and goals are two more synonyms for outcomes. Sub-components of a grade are analogous to outcomes. Overall performance, including participation, attendance, and projects, is evaluated by a grade. Outcomes measure English language learner's level of knowledge using a sequence of statements labeled with either numbers or letters. They might get an overall mark for the course and particular competency assertions in the form of outcomes.

Structure, organization, and instructional design

The fundamental stage in creating an online course for university students is defining its learning objectives so that online learning course participants are clear about what is expected of them. Make a list of English language capabilities' long-term objectives, and make sure each is clear, simple, and quantifiable. Create a syllabus for the online course by organizing the information into parts. English language learners should see what they need to do to finish the course by reviewing the overview. When many congregate in one location, classroom-based learning provides an excellent opportunity for interaction, but the experience soon loses its appeal. Because of this, it is essential to include a variety of interactive technologies while designing an online course for students in higher education. To keep learners interested and better able to recall knowledge, try playing a variety of audio or video snippets.

The best way to satisfy your students is to provide them with an exciting online course experience. Having outlined your online course, it is time to ensure that all the required components are in place to ensure that your students have the most significant possible learning experience. (Participants 01)

Because of these qualities, Moodle may successfully improve pre-service instructors' learning design capacities. English language learners have access to a wide range of tools, such as chat, forums, wikis, share resources, Q&A, multiple-choice, and voting activities, via the system. (Participants 05)

English language learning designers may improve their knowledge and self-confidence by allowing them to create and reflect on their learning designs. Moodle's ability can be repurposed to build online communities where users have more power to participate and customize the environment. The study

on Moodle's impact on designers, much alone English lecturers' education, is inadequate. Starting the design process by questioning whether the instruction satisfies a clear need or is attractive but not required is suggested. English language learners' past understanding, skills, and tools must be considered while determining whether the activity is warranted (pre-requisites). English language learners are encouraged to ask questions and check that each feature has been considered.

By doing - through repetition, practice, try, and mistake

Knowing how well English language learners understand what they are doing when attempting assignments or answering questions is critical. Unless the online activity is intended mainly for practice and repetition, they must be assisted in pausing and reflecting on their efforts rather than immediately pressing on with additional learning-by-doing. Students must get feedback on their answers to questions and activities as they go through the learning-by-doing process. So, to provide them with the best online learning experience possible, the materials' activities, questions, and exercises must be well-structured. It is obvious to students that they should try something rather than avoid it. The skill of making jobs so attractive that no one is inclined to skip them, callous ones, is occasionally an understandable form. Nevertheless, it helps make the activities as relevant to students' backgrounds and experiences as feasible.

There should be learning-by-doing for its own sake. Students should be able to get some benefit from each assignment they complete. If such students must-do activities they have previously mastered, they may become disinterested and even depressed. (Participants 01)

Even with practice, it is possible to master the quiz engine in the Moodle mechanism. The first step is to employ question design tactics that are successful. Your pupils' performance and comprehension will improve if you ask the right questions. Of course, the other way around is accurate as well. There is much information on how to develop a successful assessment. I will touch on the essential points. (Participants 26)

Getting English learners to finish reading assignments must be one of the most complex online or virtual courses. In many courses, reading is essential to comprehend the topic and succeed. For most students, delaying a reading assignment has no apparent consequences. A class debate may go on without English lecturers and learners, but there are two ways to avoid it: either stay silent or try to wing it by skimming over the material. There is no need to read much for a lecture course since the speaker will cover most of the material in class. Several issues may be resolved by adding a short mini-test to each online reading assignment. It provides English lecturers with information on what areas of reading students struggle with and which they have already mastered to tailor English language learners' online class activities to their needs. Students should only be able to take one reading mini-test at a time. Make some of the questions on a test bank random as well. Students should also bring a written query regarding a question they got incorrect to class as extra homework.

Structured feedback is built-in for English language learners.

There is an instant on-screen feedback feature in online or Moodle-based learning packages that English learners may take advantage of whenever they choose or pick an option. Whether the answers to questions and activities are given elsewhere in the materials, they may quickly verify accomplishment when performing the assignment. Students should see the original assignment, question, or activity while looking at feedback on their accomplishments. Rearranging the tasks or questions in any area where the feedback replies are positioned is possible with printed materials.

Screen-based tools are preferable if the task or question and students' choices or decisions stay visible when feedback answers emerge.

They (English learners) get more than simply the correct answer when trying a self-assessment question and need feedback on what went wrong with their effort to solve a question, not just the proper answer. (Participants 11)

I agree that structural support for learning cannot exist without feedback in the online environment. Feedback gives valuable information to help students achieve their learning objectives and improve their self-regulation abilities. Feedback is even more crucial in online courses since instructors and students are physically and geographically separated. (Participants 30)

Handwritten feedback is less reliable than digital feedback. It is accessible to students for future reference. Specific annotations organized by mark sheets, general remarks, video and audio feedback, and feedback files may be integrated to encourage learner engagement, allowing for annotations on student work, screencasts, spoken feedback, and others. English language learners may cross-reference and get a holistic development perspective through the Feedback Moodle mechanism. Feedback also lets students, English lecturers, and other participants track progress. As a result of its ability to retrieve submission inboxes and mark sheets, Moodle Assignment is well-suited for autonomous marking. Additionally, submissions and mark sheets may be retrieved from Moodle Assignment, ensuring student identity.

Introductions, overviews, and evaluations

For the balance of the instruction, an online course introduction sets the technique. It became critical to provide consumers with the context they needed to succeed. The introduction is an essential part of an online course since it is the first opportunity to attract English language learners' attention. English lecturers must consider the pace at which they repeat vital topics to their learners as they resume. Giving students a paraphrased version of the material produced the same level of recall as giving them a verbatim version. A summary of the preceding information may be inferred from this paraphrase. Course evaluations are one of the critical ways English lecturers get feedback. Well-written course evaluations help teachers determine what works and, more crucially, what may be improved. English lecturers may also customize evaluations to incorporate class-specific questions.

Creating a well-structured online course requires knowledge of course structure. Your students will enjoy the familiarity and regularity, and you will save time creating the course. You have come to the perfect place whether you are thinking of teaching online or want to improve your present course. Course assessment reports assist teachers in determining how successful they are in serving students' learning requirements. (Participants 15)

"How can I accomplish something online?" is a typical query when moving to the online world. From this perspective, we might become trapped trying to replicate or retrofit face-to-face education. There are many ways to solve this problem. Instead, ask yourself, "What do my English learners need to learn?" Using an online learning structure as a focal point helps you traverse the incredible internet possibilities. (Participants 20)

Adding structure and visual appeal to English lecturers' Moodle course page. The English language learning course page will be simpler if it is less crowded and structured, and it assists students in navigating the English language learners course page. It should be avoided cluttering the course page, customizing section names, and providing succinct course summary text. The sections may be

organized using subheadings. Create a custom header picture for the English language Moodle course. This instrument helps to distinguish English language learning courses and adds uniqueness. English lecturers as course designers should be under activity or resource Descriptions and should not be shown on the course page unless extremely short, and use a page resource to serve video or huge graphics on a different layout.

What component needs to be prepared for resource-based learning materials based on Moodle LMS?

Table 3 The Components Need to Be Prepared Before Designing RBL Instructions

Theme	Sub-Theme	Definition
Contexts	external contexts	underline learning expectations, problems, and goals that a teacher or an external agent, e.g., government, determines
	individual contexts	Individual contexts offer students the to explore their unique needs and goals. This situation is where students are encouraged to set their personal goals in learning English and how they will achieve the goals
	negotiated contexts	In negotiated contexts, students are given choices of general goals, and they decide their own specific goals that are unique to their interests
instruments	Processing instruments	In organizing cognitive loads related to learning models
	Searching instruments	Teachers can assign students to search for English materials on the World Wide Web environments using search engines such as Google, Yahoo, MSN, and others
	Manipulation instruments	Manipulation tools empower students to analyze, evaluate, and synthesize information from digital environments. Applications such as Moodle British Council’s Learn English Grammar can help students manipulate their learning.
	communication instruments	communication tools reinforce learner-to-teacher and learner-to-learner communication in exchanging information. English teachers and learners have used blogs and wikis to exchange information and collaborate in grammar, reading, and writing classes
Scaffolds	procedural scaffolds	guide students on applying a particular source's features and functions. When a teacher introduces an English application such as Duolingo, he/she needs to familiarize students with its components and functions
	Conceptual scaffolds	Conceptual scaffolds are teachers’ efforts to help students in making connections between information in digital environments and pre-defined learning goals
	Metacognitive scaffolds	Metacognitive scaffolds help students reflect, compare and revise their process of learning. Teachers can guide students in organizing their learning episodes by asking them to create a learning checklist.
	strategic scaffolds	which guide students in identifying, selecting, and evaluating information. At this stage, teachers’ information literacy is essential because they have to be able to help students identify valid and reliable English materials in immense digital environments

Context

An effective element in every online learning experience is context. However, there is limited recommendation in instructional design models on including contextual variables to increase online learning and implementation. Contextual teaching and learning aim to relate English language learners' learning to the actual world by making it relevant to their lives. Rather than relying on a single set of assumptions about what students know and can do, it uses various perspectives, including those of the students themselves. Contextual teaching places learning and learning activities into real-world and occupational settings that students can connect to, embracing material and why that learning is vital. Online contextual English language education thus involves English language learners in meaningful activities that promote their development as self-regulated learners and are interactive and collaborative. Students and their learning groups become interdependent due to these learning experiences. Authentic assessment techniques include complementary measures of student learning outcomes in context. A common thread was conducted across these developments: the perceived invariability of instructional modes and sequences and the seeming absence of context in educational designs. As a result, many educators identified the educational design idea of seamless learning to organize and coordinate contextual and context-sensitive learning. This conceptual model is especially significant when new interactive technologies for learning are combined with complicated learning experiences.

I do not think it would be possible that Contextualizing learning is becoming more crucial as better resource-based learning integration grows. A student's experience is influenced by the context they are learning. We may begin to comprehend the restrictions and potential of a person's circumstances by exploring the multi-layered world of individuals at work. As a result, we may be able to develop performance-enhancement strategies that are more comprehensive and successful. (Participants 19)

Instruments

Many instructors already utilize tools and online instruments to lower the cognitive burden. Some of it is out of control. As a strategy to develop an online Processing tools community and prevent participants from becoming isolated, the focus was observed on the interaction between students and teachers. It was determined how satisfied students were with the course compared to a group attending the identical course in person. As a result of their favorable experiences with Searching tools, the English language learners in this group scratched much more elevated than their counterparts in the control group. In other words, the Manipulation tools of online Moodle course design work. Utilizing the learner-centered concepts is advantageous due to the learner's familiarity with communication tools operation. Collaboration, active learning, teacher social presence, balancing course knowledge with student dedication and perseverance, and delivering alternative educational experiences to engage more students are examples of how students gain from engaging with English lecturers in online courses.

What can we do to improve our ability to comprehend various tools in the online environment? The more you practice, the better you become. There are several reasons for this, including that English lecturers often go over sample problems and even give students homework to practice what they have learned in class. Having a working memory that is bigger than the cognitive load of the activity is essential to English language learners' capacity to learn. (Participants 35)

Scaffolding

Instructional scaffolding is vital in the resource-based learning method through which a teacher provides additional assistance to learners to help them learn and complete assignments. The instructor builds on their prior knowledge and experiences to acquire new abilities. The aids are progressively reduced as English language learners complete their assigned tasks. Online teaching of new activities requiring numerous stages necessitates using scaffolding. Some instructors automatically incorporate scaffolding into their methods when teaching a new activity or approach, while others must do so consciously. Despite this, students may not be ready to apply strategies independently even after mastering the strategy's goal and reciting its stages like music. When taught a new skill, students with learning impairments are often not actively involved in the learning process. As a result, they are merely doing the work as if it were a chore. This notion is because students with learning difficulties often do not comprehend the underlying principles they should be paying attention to at each phase of the procedure. Because of this, online instructors should spend great attention to their learners' understanding of the online material being shown. English lecturers will tell whether their learners are learning by demonstrating the assignment independently.

Teachers must remember a few key points concerning RBL instructional scaffolding: new activities or methods that require numerous phases might benefit most from scaffolding. Instructional scaffolding may assist students at any grade level, even higher education institutions. It is possible to use scaffolding in any academic endeavor. (Participants 31)

The advent of pedagogical frameworks like Blended Learning and flexible delivery has reignited interest in RBL. To choose from a wide range of resources suited for past knowledge and learning style to meet an educational English language objective. Conventional teaching methods like lectures and tutorials and newer media including photographs, auditory, video, computer-assisted or online delivery. In both cases, resources are sourced and made accessible to English lecturers, learners, and designers of educational experiences. As a result, looking at Blended Learning and Flexible Delivery through the lens of RBL may be beneficial. Using various online learning and mechanism tools, resource-based learning encourages students to participate in learning actively. English lecturers may use resource-based learning who prefer a more didactic or expository teaching style.

DISCUSSION

In the English learning online Moodle-based classroom, resource-based learning starts with clearly defined teaching objectives derived from the English curriculum. English lecturers must then establish a standard of acceptable material and content for their learners. Warning (2021) found that learners must acquire information from various digital domains to finish the component. Structural and tolls online mechanism support should be provided to students throughout the collection process, such as requesting that they follow the pre-established timeframe. Jatmiko et al. (2018) asserted that teachers thoroughly evaluate each phase to ensure that RBL methods, learning objectives, and students' activities are all in sync. A predetermined criterion is used to evaluate each student's item. Once instructors have implemented RBL-based education, they assess its effectiveness and make necessary tweaks and adjustments next time. (Shan et al. (2019) described the components of RBL instructions in an EFL lesson that must be emphasized for a few reasons. Due to the constructivism of RBL, English lecturers must ensure that students' learning objectives reflect the ability to think at a higher level and solve problems creatively. Although learning objectives are the interpretation of the English curriculum, they should encourage students to generate their knowledge and abilities in the language. RBL content and material should be both demanding and realistic.

Online English language learners could benefit by observing an amusement or musical performed in the language's native tongue. Students learn how to behave, but they also understand how to assess their pronunciation and understand popular English terms. With modern technology, students may access a rich of English society information. K.-T. Wong et al. (2020) supported that RBL relies heavily on setting up and adhering to a timetable. Students should be guided through the RBL cycle on a solid timeframe. It is also important to establish realistic deadlines and enable English lecturers to help learners. Aikina and Bolsunovskaya (2020) justified that the Moodle-based online learning English content timetable, for example, needs to specify exactly when students are to acquire material, synthesize it, seek instructor guidance, and eventually execute the delivery. Iqdami (2016) identified that RBL teachings produce material, making rubrics a select tool for gauging students' progress in the online environment than traditional written exams. The rubrics used to evaluate students' English proficiency should be explained to students at the beginning of class, just as instructors do with learning objectives. The criteria for the final product are clearly stated in the rubrics. For example, students in an online English class are aware of the standards they must follow to properly finish the project they have been given to work with.

Resources include media, people, places, and ideas that might help students learn online. An information resource collects data points that English lecturers or learners have arranged to convey a message. Selvaretnam and Belkhatir (2019) affirmed that resources must be contextualized to establish their relevance and significance in the context in which they are learned. For the knowledge collected from multiple sources, materials must be recontextualized. Ageberg and Rådström (2021)) expressed that contextual meaning establishes a more significant framework of meaning that includes important patterns, biases, and interpretations of information. Resources are repurposed to meet the demands of a wide range of learners. It is not reinvigorated, but predigital settings are confined by how resources are produced and delivered. Existing resources may be adapted to meet the objectives and aims of designers and instructors, and students, but this is not always the case. Individuals ought to be found and adopt resources to fulfill new learning requirements not anticipated when first designed.

Online English learning educational objectives and standards were supported and reinforced by predigital instructional materials. Steinkamp (2017) noticed that predigital resources were further confined by their static nature in addition to their original design limits. Some resources, like a textbook or visual aid segment, may be utilized, but utilizing them for various purposes was challenging. Because of the resource's unchanging nature, it was often employed as its whole. In the past, Jensen (2017) discovered that educational materials included visual and auditory cues (voice, sound, music, and others.), but in the recent day, most resources have been reduced to a single medium, such as video or audio. Examples include using different symbol systems and media in computer-based teaching. For example, text and video portions have been demanding access and manipulation. Therefore, Johnson (2017) established that it has been possible to utilize the resources included in instructional media to their fullest extent. Aside from their primary function, the online environment, especially Moodle LMS, was limited outside those functions.

The study promoted our understanding of working in the early phases of the Research-Based Learning (RBL) process for the online environment in Moodle LMS. When this study examined all the data, it found that five crucial characteristics should be considered in designing and planning the RBL adoption accordingly, while several essential characteristics should be examined subsequently. The prioritization of these features in such a comprehensive way has never been attempted. Findings from previous research, notably the relevance of having a sufficient RBL adoption model, were verified in

this study. This research also found that features of Moodle-based activities and resources had not previously been examined in the literature

CONCLUSION

This research aimed to determine effective strategies for research-based learning in Moodle LMS. Based on a qualitative analysis of RBL implementation online instruments to practicality materials, it can be concluded that the RBL model might apply and integrate for English learning Moodle-based, and the educators should be aware that the mechanism is challenging in the Learning Management System. Resource-based learning has tremendous potential for English educators working in Teaching and Learning English as a Foreign Language. Moodle LMS advancements should be welcomed as an opportunity to enhance student's learning experiences, and English lecturers are no longer seen as the only reference for English knowledge. English language learners need more autonomous modes of instruction, which digital technology may provide. Given some concerns about the vast importance of information and its dependability, RBL emerges as an innovative catalyst that assists learners in exploring material aligned with predetermined educational objectives. RBL implementation in an EFL class is not without complications. Considering instructors' and students' digital literacies, digital resources provide problems for RBL.

English lecturers represent pressure to guide and encourage learning by establishing a learning-centered atmosphere via a suitable curriculum. Given the increasing availability of resources and the flexibility with which they may be handled and employed, the moment seems suitable for shifting toward a more resource-based strategy. Exploring Moodle features and preparation components of RBLEs and possibilities connected with English language pedagogy are possible in the online environment. RBLEs assist individuals in discovering, examining, diagnosing, and otherwise adapting information to fit specific English language learning requirements and make the best use of resources by developing interpretative contexts in conjunction with supporting Moodle tools and scaffolds. Learners might use the potential resources regardless of the multimedia used. The concepts of RBLE transcend narrowly defined teaching-learning frameworks, equip learners with various resources, and provide support mechanisms to aid learners with their activities.

Designing RBL user interfaces should not start with the assumption that English language learners are always intended. Due to online learning participants' actions location, this is the case. English lecturers and English language learners-technology communication problems are unavoidable, and presuming deliberate behaviors only exacerbates the problem. The primary goal is to determine the classifications and aspects of being adjusted RBL model by Moodle LMS learning designer with cross-sections. Many studies did not inform the significant absorption RBL model in the Moodle LMS, even though many researchers worked on the online environment setting. The most crucial consideration in developing an effective vitality absorption RBL system is the pace at which Moodle LMS is accustomed.

As a descriptive case study, the study raises several opportunities for future research, both in theory development and conception confirmation. More research will be necessary to refine and further elaborate our novel findings. Further study might therefore provide alternatives to the dynamics of RBL material circulation, sharing, and exchange within this specific set of educators, questioning what type of online medium infrastructure they need, individually and as a group, to support the knowledgeability of the effectiveness of the RBL model. Such a study, which may explore the

mechanisms whereby knowledge and data are converted into actionable ‘evidence,’ should also extend to current and emerging supporting organizations to assess their role in the practice.

REFERENCES

- Acar, A., & Kayaoglu, M. N. (2020). MOODLE as a Potential Tool for Language Education under the Shadow of COVID-19. *Eurasian Journal of Educational Research*, 90, 67–82.
- Ageberg, M., & Rådström, L.-G. (2021). Building Bridges Through Literature: A Practical Example and Ideas about Resource-Based Learning as Teamwork Between a Teacher, a Librarian, and Students in a Project about African History and Literature. *IASL Annual Conference Proceedings*.
- Aikina, T., & Bolsunovskaya, L. (2020). Moodle-based learning: Motivating and demotivating factors. *International Journal of Emerging Technologies in Learning (IJET)*, 15(2), 239–248.
- David-West, O., Iheanachor, N., & Kelikume, I. (2018). A resource-based view of digital financial services (DFS): An exploratory study of Nigerian providers. *Journal of Business Research*, 88, 513–526.
- Efriana, L. (2021). Problems of online learning during the covid-19 pandemic in EFL classrooms and the solution. *JELITA*, 38–47.
- Firmansyah, F. H., Sari, I. P., Permana, F. C., & Hernawan, A. H. (2020). Development of Interactive Learning Media Based on Google Application for Distance Learning in Universitas Pendidikan Indonesia. *Advances in Social Science, Education and Humanities Research*, 401, 185–190.
- Gamage, S. H. P. W., Ayres, J. R., & Behrend, M. B. (2022). A systematic review of trends in using Moodle for teaching and learning. *International Journal of STEM Education*, 9(1), 1–24.
- Hidayati, T., & Husna, F. (2020). Learning English from Home during the COVID-19: Investigating Learners’ Experience for Online and Autonomous Learning. *Langkawi: Journal of The Association for Arabic and English*, 6(2), 202–217.
- Iqdami, M. N. (2016). Resource Based Learning for Teaching and Learning English in Digital Environments. *Register Journal of Language Teaching IAIN Salatiga*, 9(2), 187–226.
- Jatmiko, B., Prahani, B. K., Munasir, S., Wicaksono, I., Erlina, N., & Pandiangan, P. (2018). The comparison of OR-IPA teaching model and problem-based learning model effectiveness to improve critical thinking skills of pre-service physics teachers. *Journal of Baltic Science Education*, 17(2), 300.
- Jensen, S. H. (2017). Gaming as an English language learning resource among young children in Denmark. *Calico Journal*, 34(1), 1–19.
- Johnson, K. (2017). *An introduction to foreign language learning and teaching*. Routledge.

- Kononets, N., Ilchenko, O., & Mokliak, V. (2020). Future teachers resource-based learning system: experience of higher education institutions in Poltava city, Ukraine. *Turkish Online Journal of Distance Education*, 21(3), 199–220.
- Kozlova, Y., & Trysak, N. (2021). Experience of moodle and online learning amid the covid-19 pandemic in the pathological physiology department of SI “Dnipropetrovsk Medical Academy of the Ministry of Health of Ukraine.” *Proceedings of the II International Education Forum «Best Educational Practices: Ukraine, Europe, World», January 24, 2021, Association for Promotion of Education and Science Globalization SPACETIME*, 297–299.
- Kuncoro, K. S., & Junaedi, I. (2018). Analysis of problem-solving on project-based learning with resource-based learning approach computer-aided program. *Journal of Physics: Conference Series*, 983(1), 012150.
- Mohamed, B. H., Ari, I., Al-Sada, M. bin S., & Koç, M. (2021). Strategizing Human Development for a Country in Transition from a Resource-Based to a Knowledge-Based Economy. *Sustainability*, 13(24), 13750.
- Murad, D. F., Hassan, R., Heryadi, Y., & Wijanarko, B. D. (2020). The Impact of the COVID-19 Pandemic in Indonesia (Face to face versus Online Learning). *2020 Third International Conference on Vocational Education and Electrical Engineering (ICVEE)*, 1–4.
- Natalia, K., & Julia, O. (2018). New use of MOODLE tools for distance English language learning (experience of Krasnoyarsk State Agrarian University). *International Multidisciplinary Scientific GeoConference: SGEM*, 18(5.4), 225–232.
- Pevneva, I., & Edmunds, P. (2020). Online learning vs. extreme learning in mining higher education under COVID. *E3S Web of Conferences*, 174, 04001.
- Phi, M. T. (2019). Becoming autonomous learners to become autonomous teachers: investigation on a MOOC blend. In *Computer-Assisted Language Learning: Concepts, Methodologies, Tools, and Applications* (pp. 1296–1316). IGI Global.
- Pradipta, R. F., Purnamawati, F., Yasin, M. H. M., Dewantoro, D. A., Irvan, M., & Susilawati, S. Y. (2020). Online Learning Resource Based on One ID Website for All Access (OIAA) as a Student Learning Assistance System. *2020 6th International Conference on Education and Technology (ICET)*, 77–83.
- Robinson, H., Al-Freih, M., & Kilgore, W. (2020). Designing with care: Towards a care-centered model for online learning design. *The International Journal of Information and Learning Technology*.
- Roliak, A. (2021). MOODLE AS INNOVATIVE TOOL IN ENGLISH LANGUAGE TEACHING FOR STUDENTS OF ECONOMIC SPECIALTIES. *InterConf*, 226–230.
- Rossyawati, R. (2018). *A Survey Study of Students' Perception Of Using Google Classroom In English Language Education Department of the Islamic University of Indonesia*.

- Ruiz-Molina, M.-E., Marín-García, A., & Llopis-Amorós, M.-P. (2018). Moodle: the more you use it, the more you love it. Evidence about the perceived usefulness of Moodle from international business students. *Conference Proceedings. The Future of Education*, 18(9), 99.
- Selvaretnam, B., & Belkhatir, M. (2019). Coupled intrinsic and extrinsic human language resource-based query expansion. *Knowledge and Information Systems*, 60(3), 1397–1426.
- Shan, S., Luo, Y., Zhou, Y., & Wei, Y. (2019). Big data analysis adaptation and enterprises' competitive advantages: the perspective of dynamic capability and resource-based theories. *Technology Analysis & Strategic Management*, 31(4), 406–420.
- Sinnott, M., & Xia, L. A. (2020a). A review of the Moodle gamification plugin “level up”: Using a Moodle plugin to gamify learning of academic vocabulary. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, 10(3), 89–95.
- Sinnott, M., & Xia, L. A. (2020b). A review of the Moodle gamification plugin “level up”: Using a Moodle plugin to gamify learning of academic vocabulary. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, 10(3), 89–95.
- Steinkamp, A. M. (2017). Knowledge of foreign languages as a key competence in international expansion: a qualitative resource-based analysis of CEOs of European companies. *Sophia Journal of European Studies, Tokyo*, 10, 147–171.
- Tinsley, T., & Dolezal, N. (2019). Language trends 2018. *Language Teaching in Primary and Secondary Schools in England. Survey Report*.
- Warning, P. (2021). “Don’t ask me, ask the horse”: Evaluating resource-based learning. *IASL Annual Conference Proceedings*.
- Wijaya, H. (2019). Resource-based learning: a paradigm shift in materials design. *6th International Conference on Educational Research and Innovation (ICERI 2018)*, 391–397.
- Wong, K.-T., Hwang, G.-J., Choo Goh, P. S., & Mohd Arrif, S. K. (2020). Effects of blended learning pedagogical practices on students' motivation and autonomy for the teaching of short stories in upper secondary English. *Interactive Learning Environments*, 28(4), 512–525.
- Wong, R. (2020). When no one can go to school: does online learning meet students' basic learning needs? *Interactive Learning Environments*, 1–17.
- Wu, W.-C. V., Hsieh, J. S. C., & Yang, J. C. (2017). Creating an online learning community in a flipped classroom to enhance EFL learners' oral proficiency. *Journal of Educational Technology & Society*, 20(2), 142–157.